

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
ILS STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.29

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.
Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT ID</u> KMRH	<u>PROCEDURE NAME</u> ILS Y OR LOC Y RWY 22L	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> SACRAMENTO	<u>STATE</u> CA		
<u>AIRPORT ELEVATION</u> 98	<u>TDZE</u> 98	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u> NONE	<u>DATED</u>	<u>MAG VAR</u> 13E	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> I-MHR	<u>COORDINATES OF FACILITIES</u> 383232.02N/1211904.18W	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
BAB TACAN		MOHOK/BAB 25.50 DME					133.05	25.50	3000
MOHOK/BAB 25.50 DME	IAF	NANEY/I-MHR 13.36 DME					133.05	6.67 (BAB R-133)	2700
NANEY/I-MHR 13.36 DME	IF	ERNIF/I-MHR 8.61 DME					220.72	4.75 (I-MHR)	2100
ERNIF/I-MHR 8.61 DME		GADBE/I-MHR 7.28 DME					220.72	1.33 (I-MHR)	1800

MISSED APPROACH

MAP:

ILS: DA
LOC: I-MHR 2.11 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1000, THEN CLIMBING LEFT TURN TO 3500 ON HEADING 090 AND SAC VORTAC R-058 TO COSKA INT/SAC 24.22 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3500.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1000, THEN CLIMBING LEFT TURN TO 3500 ON HEADING 090 AND LIN VOR/DME R-338 TO COSKA/LIN 28.43 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3500 (DME REQUIRED).

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. PROFILE STARTS AT NANEY
3. FAF: 220.72 FAF: GADBE/I-MHR 7.28 DME DIST FAF TO MAP: DIST FAF TO THLD: 5.17
4. MIN ALT: NANEY/I-MHR 13.36 DME 2700, ERNIF/I-MHR 8.61 DME 2100, GADBE/I-MHR 7.28 DME 1800, JEKAX/I-MHR 4.21 DME 800
5. DIST TO THLD FROM FAF: 5.17 MM: IM: 150 HAT: GS ANT: 1127
6. MIN GS INCPT: 1800 GS ALT AT PFAF: GADBE/I-MHR 7.28 DME 1800 OM: MM: IM:
7. GS ANGLE: 3.00 34:1: 20:1: TCH: 56.0
8. MSA FROM: SAC VORTAC 220-310 4100, 310-220 3100



COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZOA, NORCAL APP CON, ST. AERO DIR, ARPT MGR

FLIGHT CHECKED BY

GARY J VEER

Digitally signed by

ERIC N SUSKI

Feb 06, 2023

Digitally signed by

PARNELL R PRASSADA

Sep 10, 2022

Digitally signed by

ERIC N SUSKI

Oct 28, 2022

OFFICE

FPO

OFFICE

AJV-A431

OFFICE

AJV-A430

DATE

01/20/2023

DATE

DATE

TITLE

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

<u>AIRPORT ID</u> KMHR	<u>PROCEDURE NAME</u> ILS OR LOC Y RWY 22L	<u>AMDT NO.</u> ORIG	<u>CITY</u> SACRAMENTO	<u>STATE</u> CA	<u>AIRPORT ELEVATION</u> 98	<u>FACILITY</u> I-MHR
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PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM
BAB TACAN

TO
MOHOK/BAB 25.50 DME

<u>RNP</u>	<u>DISTANCE</u> 25.50	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>					<u>MIN ALT</u>
<u>OBSTRUCTION</u>	<u>COORDINATES</u>		<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TREE	385051.00N/1210727.00W		1042	164	98	4E	2000				MT-300 AT258	3000
TERRAIN	385051.00N/1210727.00W		941 (900)								AS1500	2400

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INITIAL

FROM
MOHOK/BAB 25.50 DME

TO
NANEY/I-MHR 13.36 DME

<u>RNP</u>	<u>DISTANCE</u> 6.67	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>					<u>MIN ALT</u>
<u>OBSTRUCTION</u>	<u>COORDINATES</u>		<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	384006.00N/1210118.00W		1700	164	98	4E	1000					2700
TERRAIN	384006.00N/1210118.00W		1499 (1500)								AS1000	2500

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INTERMEDIATE

FROM
NANEY/I-MHR 13.36 DME

TO
ERNIF/I-MHR 8.61 DME

RNP	DISTANCE 4.75	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	384027.00N/1210509.00W		1375	164	98	4E	500				AC98 AT127	2100
TERRAIN	384015.00N/1210509.00W		1135 (1100)								AS1000	2100

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:

INTERMEDIATE: STEPDOWN

FROM
ERNIF/I-MHR 8.61 DME

TO
GADBE/I-MHR 7.28 DME

<u>RNP</u>	<u>DISTANCE</u> 1.33	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>					
<u>OBSTRUCTION</u>	<u>COORDINATES</u>		<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	383654.00N/1210848.00W		489	164	98	4E	500				AC98 AT713	1800
TERRAIN	383627.00N/1210957.00W		275 (300)								AS1500	1800

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:



FINAL: ILS

FROM
GADBE/I-MHR 7.28 DME

TO
DA

<u>RNP</u>	<u>DISTANCE</u> 5.17	<u>PAT</u>	<u>MAP</u> DA	<u>HAT</u> 200			<u>HMAS</u>					
<u>OBSTRUCTION</u>	<u>COORDINATES</u>		<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
								ASC				298

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:

FINAL: LOC

FROM
GADBE/I-MHR 7.28 DME

TO
JEKAX/I-MHR 4.21 DME

<u>RNP</u>	<u>DISTANCE</u> 3.07	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>					
<u>OBSTRUCTION</u>	<u>COORDINATES</u>		<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	383553.83N/1211211.91W		450	50	20	2C	250				RA40 DG60	800

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:



FINAL: LOC STEPDOWN

FROM
JEKAX/I-MHR 4.21 DME

TO
I-MHR 2.11 DME

RNP	DISTANCE 2.10	PAT	MAP I-MHR 2.11 DME	HAT 402	HMAS								
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT	
TOWER (06-025571)	383441.81N/1211531.47W		235	20	3	1A	250					500	

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE	
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SEGMENT REMARKS:

MISSED APPROACH : ILS

FROM
DA

TO
COSKA INT/SAC 24.22 DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u> 130				
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
							ASC				3500
AAO	383348.00N/1210336.00W	706	164	98	4E	1000					1800
TERRAIN	383348.00N/1210336.00W	505 (500)								AS1500	2000

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE	
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SEGMENT REMARKS:



MISSED APPROACH : LOC

FROM
I-MHR 2.11 DME

TO
COSKA INT/SAC 24.22 DME

RNP	DISTANCE	PAT	MAP	HAT			HMAS 250					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				3500
AAO	383348.00N/1210336.00W		706	164	98	4E	1000					1800
TERRAIN	383348.00N/1210336.00W		505 (500)								AS1500	2000

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:

MISSED APPROACH ALTERNATE : ILS

FROM
DA

TO
COSKA/LIN 28.43 DME

RNP	DISTANCE	PAT	MAP	HAT			HMAS 130					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				3500
AAO	383348.00N/1210336.00W		706	164	98	4E	1000					1800
TERRAIN	383348.00N/1210336.00W		505 (500)								AS1500	2000

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:



MISSED APPROACH ALTERNATE : LOC

FROM
I-MHR 2.11 DME

TO
COSKA/LIN 28.43 DME

RNP	DISTANCE	PAT	MAP	HAT			HMAS 250					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				3500
AAO	383348.00N/1210336.00W		706	164	98	4E	1000					1800
TERRAIN	383348.00N/1210336.00W		505 (500)								AS1500	2000

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

CIRCLING

☒ ALL CATS

☒ CAT A

☒ CAT B

☒ CAT C

☒ CAT D

☒ CAT E

☐ NOT AUTHORIZED

OBSTRUCTION	COORDINATES	RADIUS	HAA	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
CATEGORY A											
WATER_TOWER (06-214322)	383238.22N/1211647.07W	1.30	462	246	20	10	1B	300			560
CATEGORY B											
WATER_TOWER (06-214322)	383238.22N/1211647.07W	1.81	462	246	20	10	1B	300			560
CATEGORY C											
TREE (06-103411)	383530.62N/1211411.54W	2.84	502	284	20	3	1A	300			600
CATEGORY D											
BUILDING (06-001054)	383343.00N/1211224.00W	3.71	702	434	500	50	5D	300		AC50	800
CATEGORY E											
AAO	383553.83N/1211211.90W	4.63	702	450	50	20	2C	300			800

CIRCLING REMARKS:



MSA

CENTER

SAC VORTAC

RADIUS

25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
220-310	AAO	382403.00N/1220621.00W	248	26.3	3018	164	98	4E	1000			4100
310-220	TOWER (06-001883)	381424.00N/1213007.00W	152	12.4	2051	100	50	3D	1000			3100

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

NORCAL APP CON, MHR TOWER, ZOA ARTCC

<u>WX SERVICE</u> AWOS-3PT	<u>LOCATION</u> KMHR	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KMHR	<u>DISTANCE</u> 0	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 0
<u>BACK-UP WX SERVICE</u> ASOS	<u>LOCATION</u> KSAC	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KSAC	<u>DISTANCE</u> 9.57	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 34

WX REMARKS:

RASS PRESSURE PATTERNS THE SAME
KMHR 98, KSAC 19
RA = 33.7

<u>PRIMARY NAVAID</u> I-MHR	<u>MONITOR POINT</u> MHR ATCT	<u>HRS OPERATION</u> TWR OPEN SEE A/FD TWR CLSD SEE A/FD	<u>CAT</u> 1 3
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<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>	<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW04L - MIRL (PCL)	NPI-G	
RW22R - MIRL (PCL)	NPI-G	
RW04R - HIRL (PCL), VASI-4L (PCL)	PIR-G	APPROACH, MIDPOINT, ROLL OUT
RW22L - MALSR (PCL), HIRL (PCL), VASI-4L (PCL)	PIR-G	APPROACH, MIDPOINT, ROLL OUT

<u>GLIDESLOPE ANGLE</u> 3.00	<u>ELEV RWY THRESHOLD</u> 98.3	<u>TCH</u> 56.0	<u>ELEV GS ANTENNA</u> 92.0	<u>DISTANCE FROM RWY</u> 1127	<u>VGSI ANGLE</u> 3.00	<u>TCH</u> 49.5
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FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	☒	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	☒	FT FROM CENTERLINE	

CRITICAL TEMPERATURES

<u>CRITICAL LOW</u>	<u>CRITICAL HIGH</u>	<u>ACT</u>	<u>APT ISA</u>
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CRITICAL TEMPERATURE REMARKS:



"VISUAL PORTION OF FINAL" PENETRATIONS

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or

5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PENETRATIONS REMARKS:

PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

100 FT. VEGETATION HEIGHT USED.

CONTINGENCY NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SACRAMENTO EXEC ALTIMETER SETTING AND INCREASE S-ILS 22L DA TO 332 FEET; INCREASE ALL MDAS 40 FEET AND S-LOC 22L VISIBILITY CAT C/D/E TO RVR 4500 AND CIRCLING VISIBILITY CAT D/E 1/4 SM.

CHART NOTE: FOR INOP ALS, WHEN USING SACRAMENTO EXEC ALTIMETER SETTING, INCREASE ILS CAT E VISIBILITY TO RVR 4000 AND S-LOC CAT E VISIBILITY TO 1 3/8 SM.

CHART NOTE: VDP NA WHEN USING SACRAMENTO EXEC ALTIMETER SETTING.

ORDER 8260.3 CHAPTER 2 APPLIED TO 452 AAO 383630.00N/1211030.00W.

ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.



AIRPORT ID KMHR	PROCEDURE NAME ILS OR LOC Y RWY 22L	AMDT NO. ORIG	CITY SACRAMENTO	STATE CA	AIRPORT ELEVATION 98	FACILITY I-MHR
PART D: AIRSPACE						
DOCKET #						
ALL DISTANCES TO 1/100NM; ELEVATION TO NEAREST 100 FEET; COORDINATES TO 1/100 SECOND; DEG TO 1/100 DEGREE						
DISTANCE FROM	THLD	TO 1000FT POINT	3.28			
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	0.93			
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	233.72			
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	200			
DISTANCE FROM	THLD	TO 1500FT POINT	10.45			
WIDTH OF	INTERMEDIATE	SEGMENT AT 1500FT POINT	4.00			
TRUE COURSE OF	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	233.72			
HIGH TERRAIN IN	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	1100			
THRESHOLD COORDINATES (IF STR-IN)	383347.09N/1211654.00W					
ARP COORDINATES	383319.12N/1211749.96W					
RUNWAY APCH END AND DIST FURTHEST FROM ARP	RUNWAY 4R DISTANCE 1.00 NM					
FAF COORDINATES	383650.71N/1211135.07W					
FIX NAME COORDINATES						
REMARKS						

QUALITY
20
CHECKED

FAA Form 8260-9 / (11/16) Supersedes Previous Edition

Electronic Version

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PART E: PREPARED BY

<u>NAME</u> PARNELL PRASSADA	<u>OFFICE</u> AJV-A431	<u>DATE</u>	<u>TITLE</u> AERONAUTICAL INFORMATION SPECIALIST
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